



## 2023 Tokyo Tech Research Showcase

# “Medical Devices”

**Onsite at Samyan Mitrtown Hall / Online via Zoom**

**Date: Wednesday, March 22, 2023**

**Time: 9:00 - 12:00 (THA), 11:00 - 14:00 (JST)**

**Free of charge / Advance registration required.**

Tokyo Institute of Technology (Tokyo Tech), in cooperation with the National Science and Technology Development Agency (NSTDA), will host the 2023 Tokyo Tech Research Showcase on Wednesday, March 22.

This event will focus on research relevant to “medical devices”. The theme is an urgent topic for Japan and Thailand as they both face an aging society, and should attract a lot of attention from industries.

This event will be conducted in English.

Tokyo Tech Research Showcase is organized by Tokyo Tech ANNEX Bangkok, co-sponsored by Tokyo Tech and NSTDA, and supported by Tokyo Tech Alumni Association Thailand (Thai Kuramae Kogyokai).

# Registration

Onsite: <https://forms.gle/vb1ApxF8mrTv2F2w8>



Online: [https://zoom.us/webinar/register/WN\\_7W7UGGrGT8CLP-aGFHB9aQ](https://zoom.us/webinar/register/WN_7W7UGGrGT8CLP-aGFHB9aQ)



Please choose how you would like to participate, either at the venue or online.

We will close registration when the venue's capacity is reached, but you will still be able to attend online.

Please register through the link above by Sunday, March 19, 2023.

This event will be held in English.

- Note: ① This workshop will be recorded and will be uploaded later on the website of Tokyo Tech and NSTDA
- ② Please be aware that the administrator may take photographs or videos during the event, which might be used in the website of Tokyo Tech and NSTDA.

## Tokyo Tech ANNEX

To further advance academia-industry collaborations, Tokyo Tech established Tokyo Tech ANNEX Bangkok at Thailand Science Park in March 2018. Tokyo Tech ANNEX Bangkok facilitates the identification of potential seeds for international collaborative research with companies and organizations in Thailand and the surrounding region

Inquiries: Tokyo Tech ANNEX Bangkok  
Tel: +66 2 564 8016 - 8018  
E-mail: [tokyotech@titech.in.th](mailto:tokyotech@titech.in.th)



Tokyo Tech VR is available here.  
You can obtain more information about speakers at the main lobby.

# Program

- 9:00 - 9:10      Opening remarks  
Prof. Nobuhiro Hayashi  
Vice President for International Affairs, Tokyo Tech  
Dr. Sarun Sumriddetchkajorn  
Executive Vice President, NSTDA
- 9:10 - 9:40      Assoc. Prof. Akitoshi Okino  
Laboratory for Future Interdisciplinary  
Research of Science and Technology  
Tokyo Tech  
*“Development of brand-new atmospheric  
low temperature plasmas and its  
application to materials and medical fields”*
- 9:40 - 10:10    Assoc. Prof. Marie Tabaru  
Institute of Innovative Research  
Tokyo Tech  
*“Elasticity measurement of fruits and  
muscle for agricultural and medical  
application”*
- 10:10 - 10:40    Dr. Kriskrai Sitthiseripratip  
Principal Researcher  
Assistive Technology and Medical Devices  
Research Center, NSTDA  
*“Development of 3D Printing Technologies  
In Thailand and its applications in patient-  
specific implant design and manufacturing”*
- 10:40 - 11:10    Prof. Yoshitaka Kitamoto  
School of Materials and Chemical  
Technology, Tokyo Tech  
*“Biomedical Applications of Magnetic  
Nanoparticles”*
- 11:10 - 11:15    Closing remarks
- 11:15 – 12:00    Coffee Break / Networking

# *Speakers' Profiles*



**Akitoshi OKINO**  
**Associate Professor**  
**Laboratory for Future Interdisciplinary**  
**Research of Science and Technology (FIRST)**  
**Tokyo Institute of Technology**

Akitoshi Okino received his B.E. and M.E. degrees in applied physics from Osaka University in 1989 and 1991, respectively. He received his Ph.D. degree at Tokyo Institute of Technology in 1994. He is currently an Associate Professor serving in the Laboratory for Future Interdisciplinary Research of Science and Technology (FIRST), Tokyo Institute of Technology. From 1998 to 1999, he was a visiting researcher at The George Washington University, Washington, D.C., USA. From 2006 to 2007, he was a Visiting Professor in the Department of Chemical and Biomolecular Engineering, UCLA, Los Angeles, USA. He is currently a visiting associate professor at Tohoku University School of Dentistry. He is currently the president of the Japan society for plasma spectrochemistry.



**Marie TABARU**  
**Associate Professor**  
**Institute of Innovative Research**  
**Tokyo Institute of Technology**

Marie Tabaru received her B.Eng. degree in electrical and electronic engineering in 2002 and her M.Eng. degree in human system science in 2005, both from the Tokyo Institute of Technology. She studied medical ultrasound at the University of Washington from 2002–2003. From 2008 to 2013, she was with Central Research Laboratory, Hitachi Ltd.. She currently conducts research in medical ultrasound, agricultural measurement, and instrument acoustics. She has been an associate professor of the Institute of Innovative Research, Tokyo Institute of Technology, since 2016.



**Kriskrai SITTHISERIPRATIP**  
**Principal Researcher**  
**Research Team Leader (Implantable Medical Device Technology)**  
**Assistive Technology and Medical Devices Research Center (A-MED)**  
**NSTDA**

2003 D.Eng (Manufacturing Systems Engineering) Asian Institute of Technology, Thailand

2000 M.Eng (Biomedical and Clinical Engineering) Katholieke Universiteit Leuven, Belgium

1997 M.Eng (Manufacturing Systems Engineering) King Mongkut's University of Technology, Thailand

1993 B.Eng (Production Engineering) King Mongkut's Institute of Technology, Thailand

**Work Experience:**

2019- Present Principal Researcher

Assistive Technology and Medical Devices Research Center (A-MED)  
National Science and Technology Development Agency (NSTDA)

2009- 2018 Principal Researcher

National Metal and Materials Technology Center (MTEC)

2005- 2009 Senior Researcher

National Metal and Materials Technology Center (MTEC)

2003 - 2005 Researcher

National Metal and Materials Technology Center (MTEC)



**Yoshitaka KITAMOTO**  
**Professor**  
**School of Materials and Chemical Technology**  
**Tokyo Institute of Technology**

Yoshitaka Kitamoto received his B.E., M.E., and Ph.D. from Tokyo Institute of Technology in 1986, 1988, 1998, respectively. He worked for Digital Equipment Corporation Japan and KK Raychem before he joined Tokyo Institute of Technology. Now he is an associate dean of the School of Materials and Chemical Technology. His research focuses on biomedical devices which can be applied to magnetically guided drug delivery systems and magnetic biosensing that use magnetic nanoparticles and nanostructures.